



SEQUENCE LISTING

<110> RABBANI, ELAZAR  
STAVRIANOPoulos, JANNIS G.  
DONEGAN, JAMES J.  
LIU, DAKAI  
KELKER, NORMAN E.  
ENGELHARDT, DEAN L.

<120> NOVEL PROPERTY EFFECTING AND/OR PROPERTY EXHIBITING  
COMPOSITIONS FOR THERAPEUTIC AND DIAGNOSTIC USE

<130> ENZ-53(C)

<140> 08/978,632  
<141> 1997-11-25

<150> 08/574,443  
<151> 1995-12-15

<160> 63

<170> PatentIn Ver. 3.2

<210> 1  
<211> 20  
<212> PRT  
<213> Influenza B virus

<400> 1  
Gly Phe Phe Gly Ala Ile Ala Gly Phe Leu Glu Gly Gly Trp Glu Gly  
1 5 10 15

Met Ile Ala Gly  
20

<210> 2  
<211> 20  
<212> DNA  
<213> Bacteriophage T7

<400> 2  
tgctctctaa gggtctactc 20

<210> 3  
<211> 15  
<212> DNA  
<213> Simian virus 40

<400> 3  
ctctaaggta aatat 15

<210> 4  
<211> 16  
<212> DNA  
<213> Simian virus 40

<400> 4  
tgtattttag attcaa 16

<210> 5  
<211> 19

<212> DNA		
<213> Simian virus 40		
<400> 5		
tgctctctaa ggtaaatat	19	
<210> 6		
<211> 19		
<212> DNA		
<213> Simian virus 40		
<400> 6		
tgtatTTtag ggtctactc	19	
<210> 7		
<211> 19		
<212> RNA		
<213> Bacteriophage T7		
<400> 7		
ugcucucuuaa gguuuauau	19	
<210> 8		
<211> 19		
<212> RNA		
<213> Bacteriophage T7		
<400> 8		
uguuuuuuag ggucuacuc	19	
<210> 9		
<211> 20		
<212> RNA		
<213> Bacteriophage T7		
<400> 9		
ugcucucuuaa gggucuacuc	20	
<210> 10		
<211> 49		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Description of Artificial Sequence: Synthetic oligonucleotide		
<400> 10		
ggaattcgtc tcgagctctg atcaccacca tggacacgat taacatcgc	49	
<210> 11		
<211> 55		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Description of Artificial Sequence: Synthetic oligonucleotide		
<400> 11		
gactagttgg tctcgctct tttttggagg agtgtcggtc ttagcgatgt taatc	55	
<210> 12		
<211> 46		
<212> DNA		
<213> Artificial Sequence		

```

<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 12
ggaattcgtc tcggagaaag gtaaaaattct ctgacatcga actggc 46

<210> 13
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 13
gactagtggc ctcccccgtt tag agagcatgtc agc 33

<210> 14
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 14
ggaattcgggt ctcgggtcta ctcgggtggcg agg 33

<210> 15
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 15
gactagtgcgt tacgcgaacg caaagt 27

<210> 16
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 16
ggaattcgtc tctaaaggtaa atataaaatt ttttaag 36

<210> 17
<211> 40
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 17
gactagtgcgt ctctgaccct aaaatacaca aacaatttgcg 40

<210> 18
<211> 92
<212> DNA

```

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 18  
ggaattcgtc tcgagctctg atcaccacca tggacacgat taacatcgct aagaacgaca 60  
ctcctccaaa aaagagacga gaccaactag tc 92

<210> 19  
<211> 92  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 19  
gactagttgg gctcgctctt ttttggagg aggggcgttc ttagcgatgt taatcggtgc 60  
catggtggtt tgcagagctc gagacgaaatt cc 92

<210> 20  
<211> 73  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 20  
ggaattcgtc gcgagctctg atcaccacca tggacacgat taacatcgct aagaacgaca 60  
ctcctccaaa aaa 73

<210> 21  
<211> 77  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 21  
tctctttttt ggaggagtgt cgttcttagc gatgttaatc gtgtccatgg tggtatgcag 60  
agctcgagac gaattcc 77

<210> 22  
<211> 13  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 22  
ggaattcgtc tcg 13

<210> 23  
<211> 33  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 23

gagaaaaggta aaattctctg acatcgaact ggc

33

<210> 24

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 24

tctccgagac gaattcc

17

<210> 25

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 25

ttccatttta agagactgta gcttgaccg

29

<210> 26

<211> 106

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 26

ggaattcgtc tcgagctctg atcaccacca tggacacgat taacatcgct aagaacgaca 60  
ctcctccaaa aaagagaaaag gtaaaattct ctgacatcga actggc 106

<210> 27

<211> 106

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 27

gccagttcga tgtcagagaa ttttaccttt ctctttttg gaggagtgtc gttcttagcg 60  
atgttaatcg tgtccatggt ggtagtcaga gctcgagacg aattcc 106

<210> 28

<211> 50

<212> DNA

<213> Bacteriophage T7

<400> 28

atggacacga ttaacatcgc taagaacgac ttctctgaca tcgaactggc

50

<210> 29

<211> 50

<212> DNA

<213> Bacteriophage T7

<400> 29

gccagttcga tgtcagagaa gtcgttctta gcgatgttaa tcgtgtccat

50

<210> 30  
<211> 77  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 30  
atggacacga ttaacatcg taagaacgac actcctccaa aaaagagaaa ggtaaaattc 60  
tctgacatcg aactggc 77

<210> 31  
<211> 77  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 31  
gccagttcga tgtcagagaa ttttaccttt ctctttttg gaggagtgtc gttcttagcg 60  
atgttaatcg tgtccat 77

<210> 32  
<211> 69  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 32  
gatcattttaga ccagatctga gcctgggagc tctctggcta actaggaaac ccactgctta 60  
agcctcaag 69

<210> 33  
<211> 69  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 33  
gatccttgag gcttaagcag tgggtccct agttagccag agagctccca ggctcagatc 60  
tggtctaatt 69

<210> 34  
<211> 61  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 34  
gatcaccccta ggctctcccta tggcaggaag aagcggagac agcgacgaag acctcctcaa 60  
g 61

<210> 35  
<211> 61  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 35  
gatcctttag gaggcttgc tcgctgtctc cgcttcttcc tgccatagga gaggcttaagg 60  
t 61

<210> 36  
<211> 62  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 36  
gatcatagtg aatagagtta ggcaggata ctcaccatta tcgttcaga cccacctccc 60  
ag 62

<210> 37  
<211> 62  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 37  
gatcctggga ggtgggtctg aaacgataat ggtgagttac cctgcctaac tctattcact 60  
at 62

<210> 38  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 38  
aatctagagc taacaaagcc cgaaaggaag 30

<210> 39  
<211> 28  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 39  
ttctgcagat atagttcctc ctttcagc 28

<210> 40  
<211> 70  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 40  
tcgagccatg gcttaaggat ccgtacgtcc ggagctagcg ggcccatcga tactagttaa 60  
atgcagatct 70

<210> 41  
<211> 70  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 41  
ctagagatct gcatttaact agtatcgatg ggcccgctag ctccggacgt acggatcctt 60  
aagccatggc 70

<210> 42  
<211> 29  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 42  
catgaaatta attcgactca ctatacgga 29

<210> 43  
<211> 29  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 43  
gatctccgt a tagtgagtgc aattaattt 29

<210> 44  
<211> 72  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 44  
gatccggatt gaggcttaag cagtgggttc cctagttgc cagagagctc ccaggctcag 60  
atctggtcta at 72

<210> 45  
<211> 72  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 45  
ccggattaga ccagatctga gcctggagc tctctggcta actaggaaac ccactgctta 60  
agcctaatac cg 72

<210> 46  
<211> 66  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 46  
gatccggacc ttgaggaggt ctgcgtcgct gtctccgctt cttccctgcca taggagagcc 60  
taaggt 66

<210> 47  
<211> 66  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 47  
ccggaccta ggctctccta tggcaggaag aagcggagac agcgacgaag acctcctcaa 60  
ggtccg 66

<210> 48  
<211> 65  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 48  
gatccggatg ggaggtgggt ctgaaacgat aatggtgagt atccctgcct aactctattc 60  
actat 65

<210> 49  
<211> 65  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 49  
ccggatgtg aatagagtta ggcaggata ctcaccatta tcgtttcaga cccacacctccc 60  
atccg 65

<210> 50  
<211> 67  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 50  
gatcāgcatg cctgcaggc gactctagac ccgggtaccg agctcgccct atagttagtc 60  
gtattat 67

<210> 51  
<211> 67  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 51  
ccggataata cgactcacta tagggcgagc tcggtagcccg ggtcttagagt cgacctgcag 60  
gcatgct 67

```

<210> 52
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 52
ttttttttt tt 12

<210> 53
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 53
aaaaaaaaaa aaaaa 15

<210> 54
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic oligonucleotide

<400> 54
ttttttttt ttttt 15

<210> 55
<211> 20
<212> DNA
<213> Simian virus 40

<400> 55
gagtagaccc ttagagagca 20

<210> 56
<211> 15
<212> DNA
<213> Simian virus 40

<400> 56
gagattccat ttata 15

<210> 57
<211> 17
<212> DNA
<213> Simian virus 40

<400> 57
acataaaaat ctaagtt 17

```

<210> 58  
<211> 19  
<212> DNA  
<213> Simian virus 40

<400> 58  
tataaatgga atctctcgat

19

<210> 59  
<211> 19  
<212> DNA  
<213> Simian virus 40

<400> 59  
ctcatctggg attttatgt

19

<210> 60  
<211> 164  
<212> DNA  
<213> Homo sapiens

<400> 60  
atacttacct ggcaggggag ataccatgat cacgaaggtg gtttccag ggcgaggc 60  
atccattgca ctccggatgt gctgaccct gcgatttcgc caaatgtggg aaactcgact 120  
gcataatttgc tggtagtggg ggactgcgtt cgcgcttcc cctg 164

<210> 61  
<211> 191  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic U1  
construct with Anti-A

<400> 61  
atacttacct ggcaggggag ataccatgat ccggatttag gcttaagcag tgggtccct 60  
agtttagccag agagctccca ggctcagatc tggtagtgcg tggatgtgct gaccctgcg 120  
atttcccaa atgtggaaa ctcgactgca taatttgagg tagtggggga ctgcgttcgc 180  
gctttccct g 191

<210> 62  
<211> 181  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic U1  
construct with Anti-B

<400> 62  
atacttacct ggcaggggag ataccatcgac accttgagg ggtttcgat gttgtctccg 60  
cttcttcctg cgataggaga gcctaaggat cggatgtgct gaccctgcg atttcccaa 120  
atgtggaaa ctcgactgca taatttgagg tagtggggga ctgcgttcgc gctttccct 180  
g 181

<210> 63  
<211> 178  
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic U1  
construct with Anti-C

<400> 63

atacttacct ggcaggggag ataccatgat aatgggaggt gggtctgaaa cgataatggt 60  
gagtatccct gcctaagtct attcaactatc atgtgctgac ccctgcgagt tccccaaatg 120  
tgggaaactc gactgcataa ttttgtggtag tgggggactg cgtccgcgct ttccccctg 178